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13. ABSTRACT (Maximum 200 words) <p>Described is a low cost design approach for stereoscopic head mounted displays (HMDs). The approach is to couple two miniature image sources to a helmet using an aviator's night vision system mount, and directly view the images using telescope eyepieces. Various configurations are realized by use of different image sources and different focal length eyepieces. Performance depends upon the capabilities of the individual components utilized.</p> <p>Two different types of displays constructed for teleoperation applications are described. These displays employ miniature cathode ray tubes with RS-170A compatible video driver electronics, 24.5mm focal length eyepieces, weigh approximately six pounds, provide apparent horizontal fields of view of 40 and 55 degrees, and achieve from 250 to 500+ TV lines per picture height of horizontal resolution. Limitations of and recommendations for these types of display are discussed. (SDW)</p> <p>Published in <i>SPIE Vol. 1083 Three-Dimensional Visualization and Display Technologies</i> (1989).</p>					
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